## REMARKS

Claims 1-9 and 20-30 remain pending in the application including independent claims 1, 23, and 24. New dependent claim 30 has been added. New claim 30 is directed to the elected invention directed to a method of producing a vehicle interior lining.

Claims 1-7, 20-27 and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over GB1335098 (GB) in view Hannes (US 3620906). Claim 1 requires an open-cell foam barrier layer on a rear side of a decorative layer wherein the open-cell foam barrier layer blocks the liquid plastic during back foaming to prevent the liquid plastic from penetrating the open-cell foam barrier layer toward the decorative layer.

The GB '098 reference does not disclose this feature. The examiner argues that GB '098 discloses a barrier layer that is comprised of a resin impregnated foam. The examiner states that while GB '098 does not expressly characterize the resin impregnated foam as a barrier layer, the resin impregnated foam is functionally equivalent to a barrier layer because only a small amount of polyurethane foaming composition penetrates into the foam. The examiner further argues that the resin impregnated foam is functionally equivalent to the claimed barrier layer "because as noted above, only a small amount penetrate [sic] into the foam." The examiner further states, "Nothing in the disclosure of GB '098, which remotely teaches a composition penetrating completely through a resin-impregnated open-celled foam." Applicant disagrees with this characterization of GB '098.

GB '098 clearly states, "The foaming polyurethane composition can be in direct contact with the impregnated foam sheet, whereby, a small amount of composition will penetrate into the foam sheet and thereby improve anchorage of the polyurethane foam to the other layers." Page

1. lines 63-66. First, GB '098 does not state that "only" a small amount penetrates the foam sheet, it merely states that a small amount of the polyurethane will penetrate into the foam sheet. Second, the amount of polyurethane that penetrates the foam sheet is not relevant to determining whether the foam sheet can serve as a barrier layer. It is the depth of the penetration that matters. GB '098 clearly states that it improves anchorage of the polyurethane foam to "other layers," i.e. both other layers. This clearly means that the foam is penetrating into both the foam sheet and the fibrous reinforcing layer, otherwise, how could anchorage of the polyurethane to both layers be improved.

The GB '098 reference further states, "The liquid composition is permitted to foam to the fullest possible extent, whereby an expansion pressure . . . ., which is adequate to compress the impregnated foam sheet and to drive out the resin therefrom into the fibrous reinforcing layer so as to impregnate this layer throughout its thickness." If the resin is flowing through the foam sheet and into the fibrous reinforcing layer, the polyurethane foam can follow the same path right into the fibrous reinforcing sheet. Thus, GB '098 does teach a composition that flows through the entire foam sheet and penetrates through the entire thickness of the fibrous reinforcing layer.

Claim 1 states "wherein the open-cell foam barrier layer blocks the liquid plastic to prevent the liquid plastic from penetrating the open-cell foam barrier layer toward the decorative layer." As discussed above, the examiner's "foam sheet" in the GB '098 reference clearly does not meet this limitation. In fact, GB explicitly states that the foam sheet cannot meet this limitation. "If penetration of the polyurethane into the foam sheet is not desired... one or more intermediate layers of material may be placed between the foaming polyurethane composition and the assembly formed by the impregnated sheet. These intermediate layers can be sheets or

films of paper or of thermoplastic material, or webs or tissue of fibrous material such as made of textile or glass fibre." See page 1. lines 66-77. GB '098 makes it clear that the foam sheet cannot serve as a barrier layer by itself and that if penetration is to be prevented, some other layer of intermediate material must be used. Thus, the foam sheet in the GB '098 reference does not and cannot represent a barrier layer.

The examiner also admits that it is unclear whether an outer reinforcing layer as taught by GB '098 can reasonably be considered to be a decorative layer. Applicant asserts that the outer reinforcing layer of GB '098 cannot be reasonably considered to be a decorative layer as defined within the claims. The claims are directed to a vehicle interior lining having a decorative layer, a barrier layer, and a foam backing. GB '098 is directed to the formation of exterior vehicle body panels, boat hulls, seats, furniture, and skis. The examiner points out that the GB '098 reference is also useful for making vehicle *body* elements such as seats, doors, and panels. Vehicle body elements such as seats, doors, and panels. In fact, the GB '098 reference has nothing to do with vehicle interior linings, and certainly does not teach a vehicle interior lining with a decorative layer.

While it is well settled that the terms in a claim are to be given their broadest reasonable interpretation, this interpretation must be consistent with the specification, with claim language being read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Bond, 15 USPO2d 1566, 1567 (Fed. Cir. 1990). Applicant's interior lining is clearly shown in Figures 1-3 and described in the accompanying specification. The subject vehicle interior lining is in the form of a roof liner as a part of an entire roof module. Toward the vehicle interior space, only a decorative layer 10 formed of a cloth permeable to air or an air-permeable

imitation leather is visible. Directly adjoining a rear side of the decorative layer 10 is a barrier layer 12 of open-cell foam. The barrier layer 12 is designed to be soft and flexible to be pleasing to the touch. See paragraphs [20] and [25].

One of ordinary skill in the art simply would not consider the vehicle body elements, i.e. seats, doors, and panels, of the GB '098 reference as corresponding to the claimed vehicle interior lining. This is further supported by the fact that the GB reference clearly describes a composition for a vehicle body element where the foam sheet and fibrous reinforcing layers form "a hard and rigid skin" on a polyurethane foam. See page 2, lines 34-36. The rigidity of the outer layer of GB '098 is achieved by saturating a sheet having an open cell foam structure with a liquid resin, adding a fibrous reinforcing layer onto the foam sheet, and back foaming the foam sheet. During the back foaming, the foam sheet is compressed so that part of the resin contained in the open cell structure of the foam sheet is expelled from the foam sheet and enters the fibrous reinforcing layer. No intermediate product of a decorative layer and an open cell foam barrier attached to the decorative layer is produced. Rather, the reinforcing layer, the foam sheet and the foaming compositions are attached to each other during the foaming step. See page 2, claim 1.

Further, the curing of the liquid resin leads to the foam sheet staying in its compressed form. The foam sheet will still be saturated with liquid, so that the first layers form a hard, rigid, and airtight skin. See page 2, lines 21-36. The small amount of polyurethanc foam can penetrate into the open cell foam because a corresponding amount of resin has been expelled by the foaming pressure in a direction transverse to the main extension of the body element. The resin impregnation will, however, provide a completely airtight structure, as otherwise the formed body part would not be suitable for the purpose of a boat hull or aircraft door.

Thus, for the many reasons set forth above, one of ordinary skill in the art would not equate the resin impregnated foam sheet of GB '098 with applicant's claimed barrier layer. Further, one of ordinary skill in the art would not equate the hard rigid outer skin of GB '098 with applicant's decorative layer for a vehicle interior lining. Applicant respectfully asserts that the rejection of claims 1-7, 20-27 and 29 under 35 U.S.C. 103(a) is improper and requests that the rejection be withdrawn.

Claim 23, which states that the vehicle interior lining is permeable to air, has been rewritten in independent form. Claim 24 has been amended to include the feature that the barrier layer is air-permeable. New dependent claim 30 further clarifies that the open-cell foam barrier layer comprises a soft layer such that the intermediate product of the decorative layer and open-cell foam barrier layer cooperate to provide the vehicle interior lining with a soft touch exterior surface. The GB '098 reference cannot meet any of these limitations.

With regard to claims 23 and 24, after completion of the production method disclosed in GB '098, neither the fibrous reinforcing layer nor the foam sheet are air-permeable. As described in detail in GB '098, the foam sheet is impregnated with liquid resin, and this impregnated sheet is in direct contact with the fibrous reinforcing layer. This direct contact, as discussed above, allows the resin to seep through fibrous reinforcing layer. Even if this fibrous reinforcing layer could be equated to a decorative layer of an interior lining (which applicant asserts it cannot), this seepage would destroy the aesthetic appearance and soft touch feel of the interior lining. Further, curing and hardening the resin destroys the air-permeability of the interior lining.

The examiner first argues that this resin reinforcing layer could be made into a decorative layer by coloring a fibrous layer as taught by Hannes. However, mere coloring of the fibrous layer does not address the problems identified above. The resin would still seep through the decorative layer and there would still be no air-permeability.

The examiner alternatively argues that the fibrous reinforcing layer of GB '098 could be replaced with a fiber glass decorative layer as taught by Hannes. Hannes explicitly teaches that an airtight polyethylene film be used as a barrier layer to prevent the resin binder in the glass fiber mat from contacting the decorative layer. In other words, Hannes teaches the use of an antight barrier layer, not an open cell, air permeable barrier layer as claimed by applicant. At best, the structure of GB '098 would be modified to include an airtight barrier layer as taught by Hannes between the decorative layer and the foam sheet. This modification is clearly different than applicant's invention as set forth in claims 23 and 24.

Claims 8 and 28 stand rejected to under 35 U.S.C. 103(a) as being unpatentable over the references used in the rejection of claims 1-7 and further in view of US6499797 to Bohm et al. (Bohm). For the many reasons set forth above, the rejection of claims 1-7 is improper. Bohm does not make up for the many deficiencies of the base rejection.

Claim 9 stands rejected to under 35 U.S.C. 103(a) as being unpatentable over the references used in the rejection of claims 1-7 and further in view of US5230855 to Kazgarzadeh et al. (Kazgarzadeh). For the many reasons set forth above, the rejection of claims 1-7 is improper. Kazgarzadeh does not make up for the many deficiencies of the base rejection.

Claims 1-9 and 20-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the references used in the rejection of claim 1 and further in view of US 6204209 to Rozek et al.

or Applicant's Admitted Prior Art (AAPA). The examiner again states that it is unclear whether the fibrous layer in GB '098 can be considered a decorative layer. For the many reasons set forth above, applicant asserts that this interpretation is not reasonable.

The examiner argues that "In any event, it would have been obvious in the art, motivated by the desire to enhance the aesthetic appearance of a resultant impregnated article, to apply a porous decorative fabric onto a fiberglass layer in forming the article taught by GB '098, because it is a common practice in the art to form an automobile component (i.e. automobile headliner) which is similar to an interior automobile component suggested by GB '098, where a porous decorative fabric is applied onto a fiberglass reinforcing layer as exemplified in the teachings of Rozek... or AAPA...." Applicant disagrees.

Independent claims 1, 23, and 24 do not claim applying a porous decorative fabric applied in the manner argued by the examiner. Applicants invention as defined in the claims is directed to a method where a decorative layer and a barrier layer together are back foamed by applying a liquid plastic to the barrier layer. For the many reasons set forth above, GB '098 does not disclose the use of a barrier layer. Further, neither Rozek nor AAPA disclose any type of back foaming or application of a liquid plastic material to a barrier layer as defined in the claims.

Finally, he examiner's proposed modification cannot render the prior art unsatisfactory for its intended purpose and cannot change the principle of operation of the base reference. See MPEP 2143.01. The examiner seems to be arguing that the component of GB '098 be modified to include a porous decorative fabric on top of the fibrous reinforcing layer. GB '098 was seeking to provide a body member with a hard rigid skin suitable for vehicle body components, boat hulls, and air planes. To apply a decorative fabric over such a hard rigid outer skin simply

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does not make sense. Boat hulls and air planes are not covered with fabric. As the entire GB '098 reference is directed to providing a component with a hard rigid outer skin, to modify such a component in the manner suggested by the examiner would clearly render the prior art unsatisfactory for its intended purpose and change the principle of operation of the component of GB '098.

For the reasons set forth above, applicant respectfully requests that all rejections under 35 U.S.C. 103(a) be withdrawn. Applicant asserts that the present application is in condition for allowance, and a Notice to that effect is earnestly solicited. Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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**CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8** 

I hereby certify that this correspondence is being facsimile transmitted to the United States patent and Trademark Office, fax number (703) 872-9306, on June 4, 2005.